Magnis Resources LIMITED

FOR RELEASE
1 February 2016

NACHU GRAPHITE PROJECT UPDATED MINERAL RESOURCE

HIGHLIGHTS

- **Nachu Mineral Resource increases by 11.5% to 174 Mt at 5.4% Graphitic Carbon (Cg) at 3% Cg cut-off grade**
- **71% or 124 Mt classified as Measured or Indicated Resources**
- **Nachu Mineral Resource now contains over 9.3 Mt of contained graphite an increase of over 14%**
- **Updated Mineral Resource included only infill drilling aimed at conversion of existing resource material to Measured category classification**
- **Bankable Feasibility Study (BFS) on track**

Magnis Resources Limited ("**Magnis**" or the "**Company**") (ASX:MNS) is pleased to declare an updated Mineral Resource Estimate for Block F and Block FSL of the Nachu Graphite Project in Tanzania. Block F Mineral Resource contains the main orebodies being assessed in the BFS for initial production of the exceptional quality graphite flake that is held within the Nachu project area.

The Mineral Resource Estimate now comprises 174 Million Tonnes (Mt) at an estimated grade of 5.4% Graphitic Carbon (Cg) classified as either Measured, Indicated or Inferred Resources and is reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012).

The total tonnes of the Nachu Mineral Resource Estimate have increased by 11.5% from the 156Mt at 5.2% graphitic carbon (Cg) at 3% Cg cut-off grade as announced to the ASX on 26 November 2014.

71% of the tonnes in the Mineral Resource Estimate is classified in the Measured or Indicated resource categories, compared to the 66% as reported previously whilst 36% of the tonnes in the Mineral Resource Estimate is classified as Measured compared to 3% previously, highlighting a significant increase in resource confidence. Contained graphite for the Mineral Resource has increased to 9.3 Mt compared with 8 Mt previously.

CEO Dr Frank Houllis commented: “We are delighted at seeing our resource increase in size and grade with the infill drilling. Today’s upgrade will lead to a longer mine life whilst the deposit remains open in all directions.”

“Today’s announcement coupled with our recent results for the Nachu Graphite in a lithium-ion battery and our BFS which remains on track for completion this quarter points to an exciting year ahead for Magnis.”

Table 1: Nachu Graphite Project Global Mineral Resource Estimate as at January 2016

Deposit	Category	Oxidation	Mt	%Cg
All Blocks >3% Cg	Measured	Oxide	1.9	4.9
		Primary	61.6	4.7
	Indicated	Oxide	2.4	6.3
		Primary	58.6	5.7
	Inferred	Oxide	2.6	5.3
		Primary	47	5.8
Sub Total	All Categories	Oxide	7	5.5
		Primary	167	5.4
All	**All Categories**	**All**	**174**	**5.4**

Notes: 1. Cut-off of 3% graphitic carbon
2. Rounding may result in differences in total and average grades.

Table 2: Nachu Graphite Project Mineral Resource Estimate by Block

Block			B		D		F		FSL		J	
		COG	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade
		%Cg	Mt	%Cg	Mt	%Cg	Mt	%Cg	Mt	%Cg	Mt	%Cg
Measured	**Oxide**	3.0					1.7	4.9	0.2	5.2		
	Primary	3.0					57.8	4.6	3.8	5.6		
Indicated	**Oxide**	3.0	0.2	6.5			1.3	5.4	0.2	5.4	0.7	8.3
	Primary	3.0	6.6	6.3			38	5.1	5.0	5.1	9	8.1
Inferred	**Oxide**	3.0	0.1	5	0.7	5.9	1.7	5	0.01	3.2	0.04	10.1
	Primary	3.0	0.8	5	19.5	5.9	22.5	5.2	1.0	3.5	3.2	10.2
Sub Total			**7.6**	**6.1**	**20.2**	**5.9**	**123.1**	**4.9**	**10.2**	**5.1**	**12.9**	**8.6**

Notes: 1. Cut-off of 3% graphitic carbon
2. Rounding may result in differences in total and average grades.

Mineral Resource Estimate

The updated Nachu Graphite Project Mineral Resource Estimate was carried out by independent mining consultancy AMC Consultants Pty Ltd (AMC).

The Mineral Resource Estimate with 63.5 Mt in the Measured and 61 Mt in the Indicated Resource category represents one of the largest Mineral Resources of large flake graphite in the world. In particular, the Block F deposit with 59.5 Mt in the Measured and 39.3 Mt in the Indicated Resource category, complements the recently announced outstanding metallurgical results which demonstrate the superior performance of Nachu graphite concentrate (without any chemical or thermal purification) over synthetic graphite for use in lithium-ion battery anodes.

The Nachu exploration tenement covers an area of approximately 199 km^2 in southern Tanzania (Figure 1). The Mineral Resource is split into 5 deposits (Block B, D, F, FSL & J) with mineralisation hosted in graphitic schist within a sequence of meta-sedimentary schists with minor un-mineralised dolomitic marble and gneisses of the greater Mozambique Metamorphic Belt. All deposits have mineralisation at or near surface. Recent structural studies have shown the eastern mineralised limbs of the Block F deposit to be shallower than originally interpreted. The orientation of the Mineral Resource modelling follows the generally shallowly dipping limbs of the open-folds in the deposit. A 3-D view of the modelled Block F deposit is presented in Figure 2 along with a representative cross-section in Figure 3.

The Mineral Resource has been estimated within mineralised envelopes interpreted using geological data and a nominal 1.8% Cg grade outline. The Ordinary Kriging (OK) estimation method has been used to estimate the Cg grade for each cell within the mineralised envelopes. Dynamic anisotropy has been used for the grade estimation to honour bedding orientation in folded zones. This method is considered appropriate for the relatively consistent nature and grade of mineralisation.

The bulk densities in each area have been assigned the average of density measurements in the oxide or primary zones.

The Mineral Resource classification criteria are based on drill spacing and outcrop, and continuity of geological and mineralisation grade interpretations. The cut-off grade is based on the proximity of mineralisation to surface, the potential mining methods and costs, and assumed processing and recovery values based on updated test work. The Mineral Resource Estimate is classified as a combination of Measured, Indicated and Inferred classifications and has been reported in accordance with the JORC Code, 2012.

Bankable Feasibility Study (BFS)

As previously announced Sedgman have been appointed to lead the BFS which remains on track for release in the current quarter.

Figure 1: Location of the Nachu Graphite Project within Tanzania

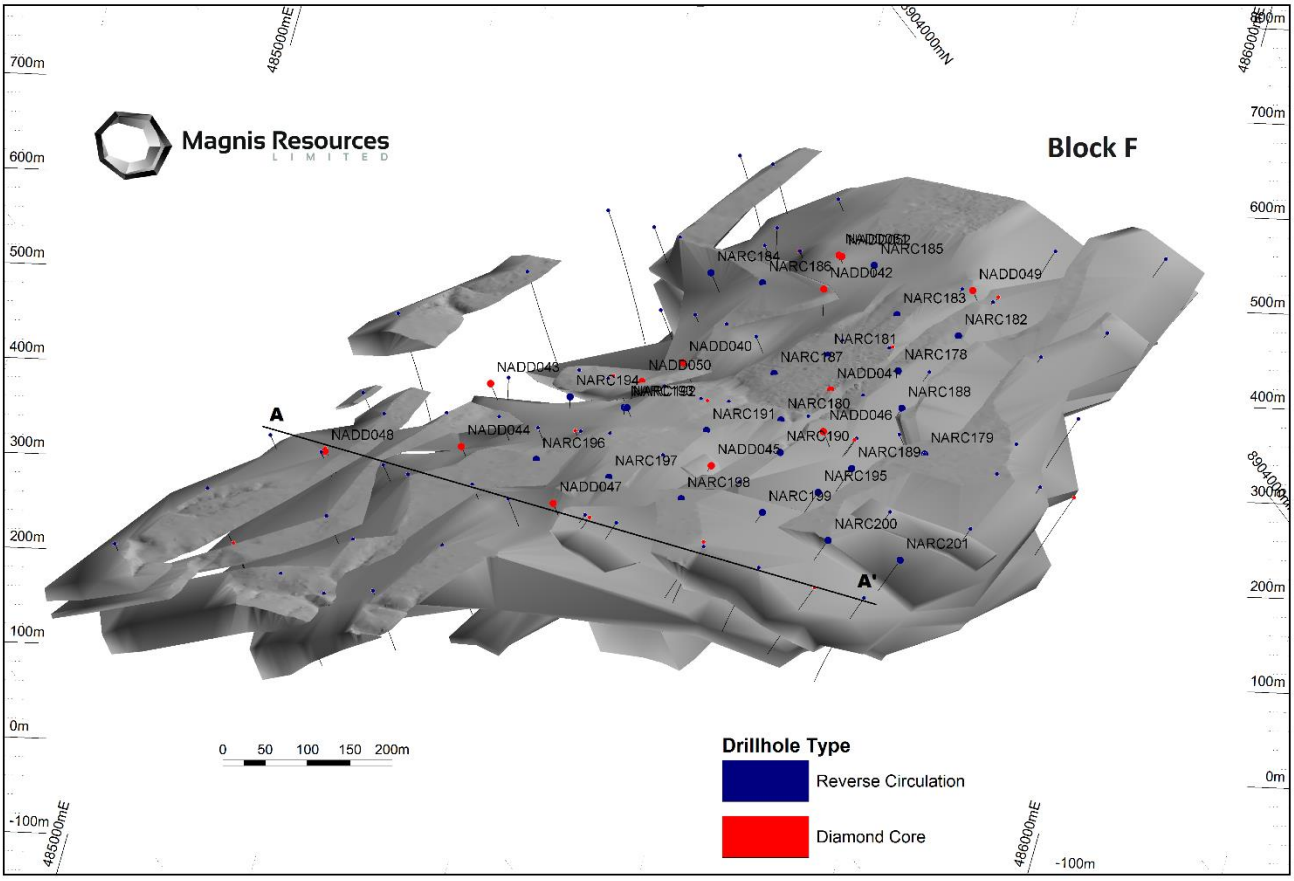
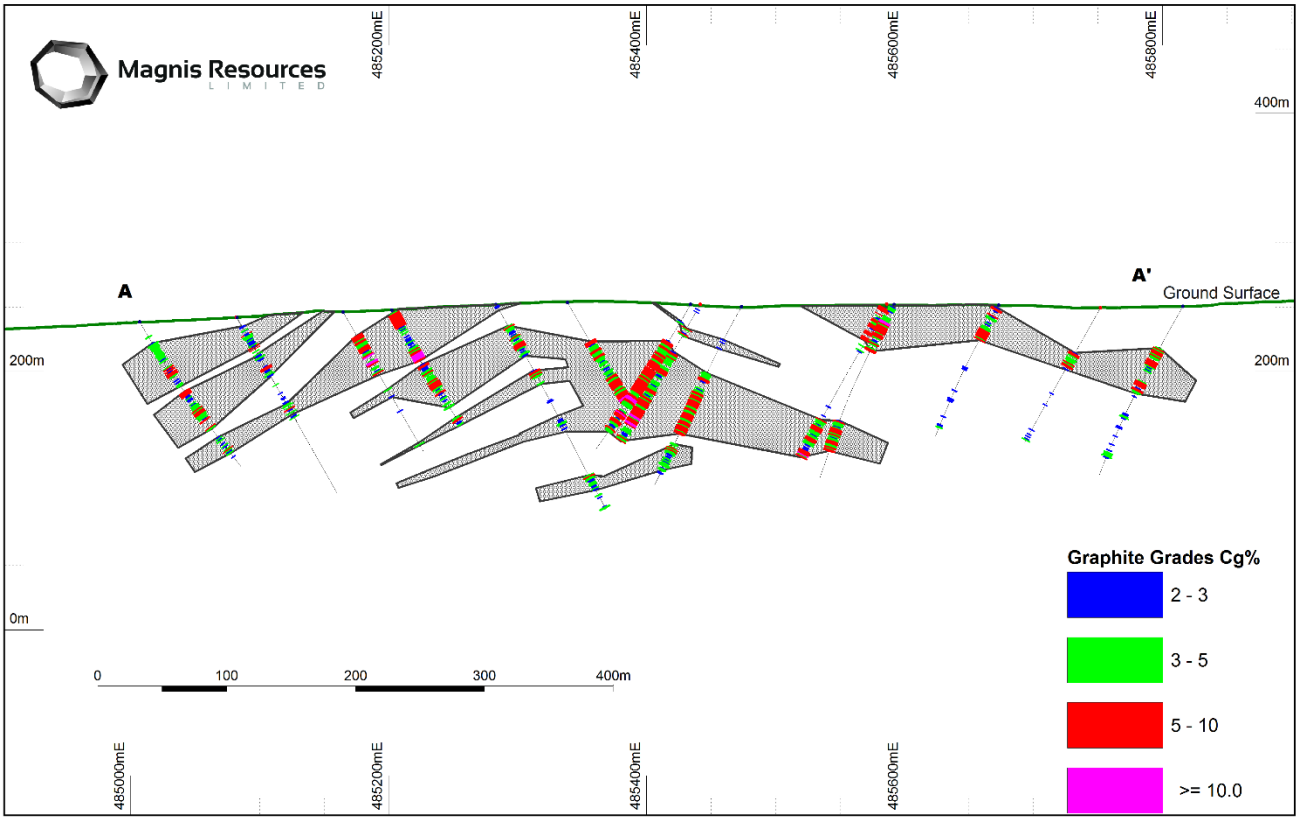


Figure 2: 3D view of Block F deposit looking northwest with corresponding section line



Note: near-section drillholes holes projected to plane and may affect the appearance of model alignment.

Figure 3: Cross section A-A' looking North within Block F, showing modelled mineralisation with downhole grades highlighted.

Dr Frank Houllis
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Competent Person's Statement

Information in this report that relates to Exploration activities and Exploration results is based on information compiled by Mr Brent Laws, a Competent Person who is a registered Member of the Australasian Institute of Mining & Metallurgy. Mr Laws is a full time employee of Magnis Resources Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results. Mr Laws consents to the inclusion of the data in the form and context in which it appears.

The information in this report that relates to the Mineral Resources is based on information compiled by Mr A Proudman, a Competent Person who is a Fellow and Chartered Professional Geology of the Australian Institute of Mining and Metallurgy. Mr Proudman is employed by AMC Consultants Pty Ltd. Mr Proudman has no financial interests in Magnis Resources Limited and is independent of the company. Mr Proudman has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr A Proudman consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

Appendix 1

JORC Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Sampling is by Reverse Circulation (RC) and HQ3 Diamond (DD) drillholes. Some DD have twinned existing RC holes for lithology and grade verification, and structural data. • RC samples collected at 1m intervals and either run through an onboard cone splitter for 2015 (recent) drilling or riffle split for pre 2015 (earlier) drill programs to obtain an A sample for analysis and a B sample for QAQC verification. • Samples are submitted for LECO analyses as well as for ICP Multi-element analyses. The recovered DD core was cut lengthwise with a rock saw to produce 1 m samples. Where lithological boundaries did not fit the 1m geometry, the sample length was to be a minimum of 0.5m or a maximum of 1.5m. Core was halved for normal analyses. In the case of duplicate analyses (5% of samples submitted), the core was quartered. The remaining core is retained in stratigraphic sequence in the core trays.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• The RC drilling was completed at 5 ½ inch diameter using a Schramm 450 drill rig. • The core drilling was completed with a Christensen CS -1400 drilling rig. The drilling equipment was HQ3 (triple tube) sized. • All core holes if not vertical are orientated to facilitate structural measurements. • Drilling is planned to optimally intersect the target horizon as close as possible to perpendicular.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• RC samples are weighed as recovered and after splitting to assess the reliability of the splitting process. • RC chip specimens are collected in chip trays. • Core recovery measurements are recorded for every borehole. • To date no discernible loss has been noted with sample recovery processes.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• All holes drilled are logged in full and sampled by the site geologists. • All the logged information which includes depth, lithology, mineral assemblage, Cg mineralization (laboratory data), collar survey and geology are recorded in the field logging sheets and in digital format. • The entire core is recorded in sequence as digital photographs.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• RC samples are routinely being taken in 1m intervals via a dry and regularly cleaned cyclone and 1/8th split using a cone splitter for recent drilling in order to obtain an A sample for analysis and a duplicate B sample. • The core is split by saw and half core is submitted for analyses generally as 1 m samples. When a duplicate sample is submitted, the core is quartered. • Samples are submitted for LECO analyses as well as for ICP Multi-element analyses. • Within the total samples dispatched a random sequence of 5 % each of standards, blanks and duplicates were included. Sample preparation is done by ALS in Mwanza (Tanzania), before the prepared samples are shipped to ALS in Brisbane for content determination. • Sampling procedure include drying, crushing, splitting and pulverizing ensures that 85% of the sample is 75 micron or less in size. A split of the sample was analysed using a LECO analyser to determine carbon in graphite content.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• All samples are labelled with a unique sequential number with a sample ledger recording all samples. • Samples are analysed under the ALS code C-IR18 (Graphitic Carbon by LECO, Brisbane). For the RC cuttings the multi-element analysis is coded ME-ICP41 (35 Element Aqua Regia ICP AES, Brisbane). • QA/QC samples are included in a random sequence at a frequency of 5 % each for standards, blanks and duplicates. Results indicate acceptable levels of accuracy and precision are achieved. • The laboratory uses internal standards in addition to the standards, blanks and duplicates inserted by Magnis Resources Limited and parties related to Magnis Resources Limited. • The standards are supplied by an external and independent third party. The blanks are made from non-graphitic rock outcrop in the vicinity of the project area. The duplicates are a B sample selected from within the drilling sequence. • The detection limits are deemed sufficient for the purpose of future Mineral Resource estimation.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• External overview of Magnis Resources Limited and parties related to Magnis Resources Limited field geologists is by an external consultant who regularly assess on site standards and practices to maintain consistent practice. • The twinning of some RC boreholes by DD was completed and was used to verify sampling validity. • The primary data is collected using a logging and sampling data collection system allowing full security of collected data stored in company offices in Dar Es Salaam, Adelaide, and Sydney. • Assay data has not been adjusted.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• A hand-held GPS was used to site the drill holes (Easting, Northing and RL with a horizontal accuracy of +/- 5 metres) and reported using ARC 1960 grid and UTM datum zone 37 south grid for Blocks B,D and J, and using WGS84 grid and UTM datum zone 37 south grid for Blocks F and FSL. Blocks B, D and J will be moved to WGS84 grid with their next estimations. • All drill holes have had the location verified and surveyed using an independent surveyor with a differential GPS (Trimble R8 GNSS instrument). • Topographic control is excellent due to the high resolution DTM survey completed in 2014 by Southern Mapping with a high level of accuracy required for project construction planning. • The dip and azimuth of the all holes were measured using a Reflex ACTII down-hole survey tool.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The spacing of RC drilled holes is a nominal grid of 100m x 100m or up to 200m x 200m for tabular zones of mineralisation • Drilling programs have included further infill drilling to a nominal 100m x 100m spaced grid in order to confirm an increased confidence in geological continuity, structure and mineralisation. • Compositing to 1 m was applied to exploration data for Mineral Resource estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• From recent geotechnical evaluation and surface mapping regional foliation is varied but an overall dip at low angles of between 5 and 15 degrees to the west and 15 to 30 degrees in the east. • 3D modelling of the 2014 EM highlighted structural domains allowing greater accuracy in drilling orientation which has been followed up by downhole acoustic televiewer logging for greater definition and accuracy of foliation and structure angles and directions. • EM survey modelling had Block D interpreted as shallow angled rolling horizons. Vertical drillholes are appropriate to target mineralisation in Block D • EM survey data modelling for Blocks B, F & J have interpreted antiform structures with shallow dipping horizons away from the hinge zone. All holes were orientated with a dip and azimuth to intersect the mineralisation perpendicular to strike and across the

Criteria	JORC Code explanation	Commentary
		dip of the mineralisation or to investigate and confirm the geological model.
Sample security	• *The measures taken to ensure sample security.*	• The samples are split and packed at the drill site and sealed prior to daily transport to the field office in Ruangwa, which has 24 hour security, prior to transport by locked commercial truck carrier to ALS Mwanza. ALS ships the sealed samples after preparation to Brisbane. • The remaining B samples and core are kept at the manned site sample storage facility and the Ruangwa office.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The 2014 Mineral Resource estimation was undertaken by independent consultants AMC Consultants Pty Ltd (AMC) who completed a site visit at the time. The sampling protocol was observed to conform to industry standards. AMC completed the 2016 Mineral Resource Estimate.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The prospecting license PL 9076/2013 was granted (renewal) on 12 April 2013 and is current to April 2017 upon which the standard renewal process will be required. The area covered by the prospecting license is 198.57 km^2. • On 9 September 2015 Special Mining Licence SML 550/2015 was granted for a period of 16 years over 29.77 km^2 of PL 9076/2013, covering a suitable area required for mine development including the resource areas of Blocks F, FSL, J and B. • The SML and PL are situated in the Ruangwa District of south-east Tanzania. • The PL is held by Uranex Tanzania Ltd. and is not subject to joint venture agreements, third parties, royalties or partnerships. The surface area is administered by the Government as native title. The area is rural, with wilderness areas and subsistence farming occurring on the PL. • The tenements are in good standing with no known impositions.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No exploration for graphite has been done by other parties in this area. Some gemstone diggings for tourmaline are present in the PL.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Nachu project is situated in graphitic schist with associated dolomites and gneisses. • The majority of EM modelling and geological intercepts indicate open folded anticlines with various dips to fold limbs in each resource Block. • The graphite mineralization is mostly associated with the schist, and is metamorphic (meta-sedimentary) in origin.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following*	• No material information has been deliberately excluded. • A table of recent drillholes and drill holes transferred

Criteria	JORC Code explanation	Commentary
	information for all Material drill holes: ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	to WGS 84 zone 37 south grid including coordinates, dip and azimuth is included as an appendix in this document. Earlier drilling for blocks B, D, and J are previously reported in 2015.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Significant intercepts when reported based on a 5% cut-off with a minimum length of 5 m which has an allowable maximum 2m of internal low grade material. All significant intercepts are generated using Micromine softwares automated advanced grade compositing function. • Higher grade significant intercepts are reported based on a 10% GC cut-off with a minimum length of 2m with no internal low grade material. All significant intercepts are generated using Micromine softwares automated advanced grade compositing function.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The majority of EM modelling and geological intercepts indicate folded anticlines of various limb dips in each key resource Block. • Holes were vertical or orientated towards an azimuth so as to intersect the mineralization in a perpendicular manner.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Block plans included in this report show the distribution of the RC and DD boreholes.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting*	• Any and all reported intervals are downhole intervals from drilling aimed at being as perpendicular to mineralization as practical.

Criteria	JORC Code explanation	Commentary
	of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• The electro-magnetic survey has been processed with data used to target mineralization in the most efficient and representative manner. • The regional mapping was combined with the lithological and quality information from the drill holes, to provide a structural framework around which mineral envelopes were modelled. • Metallurgical testing is continually ongoing with test work currently focused on the Block F area using representative downhole composites of similar lithological composition, grade and mineralization characteristics.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further infill and extension drilling is possible with an aim to further increase resource confidence over a larger area or to expand on known extents of mineralization. More than 800 Ha of potential target area has been identified. • Umpire samples have been routinely dispatched to a third party laboratory. • The samples for metallurgy are routinely sent to the laboratories and interested parties.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database Integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Drillhole coordinates were plotted on plan maps to identify errors. Drill sections were produced to match collar dips and azimuths. • Checks undertaken include but are not limited to: o All collar co-ordinates within the permit area. o No duplicate drillholes. o No overlapping FROM and TO intervals in the geology and assay tables. o Downhole survey dip and bearing angles appear reasonable. o No duplicate records. o No anomalous assay values.
Site Visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit was undertaken by the competent person in August 2014 and therefore not considered necessary for the 2016 update. • In 2014 one diamond drill rig and two RC drill rigs were seen in operation. • Graphitic materials were observed in outcrop and in drill samples. • Drill core, core handling facilities and sample storage facilities were inspected. • Photographic imagery of the diamond drillcore was sighted.
Geological Interpretation	• *Confidence in (or conversely, the uncertainty of) the geological*	• Geological interpretations are based on drillhole data, interpretations of geotechnical evaluations, EM geophysical measurements and graphitic outcrop

Criteria	JORC Code explanation	Commentary
	interpretation of the mineral deposit. • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	data. • The orientation of the interpreted geological trends, and the continuity in grade observed were used to generate the interpretation of mineralization. • The strata containing mineralization has formed in continuous layers during deposition separated by and inter-tonguing layers of sub-economic grade and interpretation of corresponding mineralized strata in adjacent holes may align differently from that interpreted. Particularly where potential grade trends differ from other supporting data. However, given the nature and extent of continuity of mineralization, this is unlikely to have significant effect on the Mineral Resource estimation. • Collection of more drilling data including orientated data should continue to validate the interpretation. • New drill data will be collected and collated using current procedures aligned with industry standards.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Nachu deposit comprises five mineralized areas, being Blocks B, D, F, F South Limb, and J. • These deposit cover a combined strike length of 5.5 km and an average plan width of up to 300 m for B,D,J, F South and 800 m for F (often comprising multiple mineralized horizons separated by barren or low grade horizons), to depths between 150 m and 250 m below surface. • The mineralization occurs at or near surface.
Estimation and Modelling Techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software & parameters.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource Estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for AMD characterisation).* • *In the case of block model interpolation, the block size in*	• The Mineral Resource Estimates for Block B, D and J are unchanged since 2014. • Block FSL has no new data and has been estimated with the dataset translated to the WSG84 grid system. There is no material change. • Block F has been re-estimated including data from drilling completed in 2015 and the dataset translated to WGS84 grid system • For F Block statistical review and variography has been undertaken using Visor and GeoAccess software. • The estimation method was a block model using Ordinary Kriging (OK) of graphitic carbon (GC), with parent cell estimation, using octants and a discretisation of 4x4x2. • This method is considered appropriate for the relatively consistent nature and grade of mineralization. • The grade estimation has been undertaken using Datamine Studio 3 software. • The cell model block size was 10 x 40 x 2 m in easting, northing and vertical directions with sub- celling. This is considered suitable for the relatively flat, open folded and relatively narrow mineralized lodes. • Dynamic anisotropy has been used to adjust the search orientation during the grade estimation and honour bedding orientation in folded zones. • The estimation has used hard boundaries.

Criteria	JORC Code explanation	Commentary
	relation to the average sample spacing and the search employed. • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	• A top-cap of 15% GC was applied in the western fold limb of Area F in the mineralized domains. No top-caps were required to be applied to any other Blocks estimated. • Cell model estimates were compared statistically and visually to the drillhole assay data.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnage estimated is based on dry tonnes. Bulk density samples were oven dried.
Cut-off Parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Geological interpretation and mineralization has good grade continuity on a nominal 1.8% GC cut-off. Mineral Resource estimates used 3% GC cut-off for reporting.
Mining Factors or Assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• It has been assumed that the mineralization will be amenable to open-pit mining due to: ○ the shallow nature of the lodes near surface, ○ the generally flat or shallow dipping orientation of the lodes, ○ the thickness of the lodes, ○ the consistent grades, and ○ Tanzanian mining costs are typically $2.50 to $3.50 per tonne.
Metallurgical Factors or Assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made*	• A significant amount of metallurgical testwork has been completed to date showing favourable treatment processes and product marketability. • Test results from initial qualification work of Nachu graphite as feedstock for lithium-ion battery anode production showed micronised coated graphite, upgraded to 99.8%TGC without any chemical or thermal purification, achieved first cycle efficiency rate of 97.1% equating to a loss of only 2.9% and is an improvement of 42% over synthetic graphite.

Criteria	JORC Code explanation	Commentary
	when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• 87% of flake graphite is in Large (+180-300 microns), Jumbo (+300-500 microns) or Super Jumbo (+500 microns) categories with repeatable results in Blocks F and FSL. • No deleterious elements present.
Environmental Factors or Assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Nachu Graphite Project has been issued with an Environmental Certificate from the National Environment Management Council of Tanzania based on the Environmental Impact Study completed to International Finance Corporation standards. Subsequently Special Mining Licence SML 550/2015 has been granted for the Nachu Graphite Project. Ongoing environmental and social impact programs will continue as per licensing agreements.
Bulk Density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Density measurements generally use dry weight and the measured dimensions of the core sample collected. Recent drilling at F Block has also used the immersion method • The methods of density measurement are suitable to the rock type and style of mineralization. • 941 bulk density measurements were recorded within mineralized rock types. • Bulk densities used were based on the average bulk densities for oxide and primary rock in each area.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations,*	• The Mineral Resource classification criteria and cut-off grades used are based on: ○ Drill spacing. ○ Proximity of mineralization to surface. ○ Potential mining methods. ○ Assumed processing and recovery values based on preliminary test work. • The Nachu Mineral Resource is classified as a combination of Measured, Indicated and Inferred

Criteria	JORC Code explanation	Commentary
	reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	Mineral Resources. • The Competent Person is satisfied that the classification appropriately reflects what is currently known about the continuity of geology and mineralization, considering the available local results and regional setting and style of mineralization.
Audits or Reviews	• *The results of any audits or reviews of Mineral Resource Estimates.*	• There have been no internal or external audits completed to date.
Discussion of Relative Accuracy/ Confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource Estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Further drilling should be focused in the areas where there is a requirement to increase confidence. • Oriented diamond drillholes are required to increase the amount of data and to undertake a structural study to increase the understanding of the characterization within the mineralized lodes. • All future data should be collected using industry best practice methods. • Given the continuity of the deposit geology and mineralization and relatively consistent grades an indicator kriged method of GC estimation was considered appropriate. • There is sufficient data to undertake geostatistical assessment and incorporate variography into the estimation techniques. • The global estimate of tonnes and grade for each block and the confidence level for each zone within the block is considered reasonably accurate.

Appendix 2

Drill holes used for the Nachu Mineral Resource estimation.

Block	Hole ID	X	Y	Z	Max Depth	Azimuth	Dip	Hole Type
F	NADD021	485401	8903967	244	126	90	-60	DD
F	NADD028	485526	8904192	255	141	270	-60	DD
F	NADD029	485317	8903797	253	282	90	-60	DD
F	NADD030	485442	8903607	252	123	270	-60	DD
F	NADD031	485586	8903625	252	138	270	-60	DD
F	NADD032	485082	8903612	242	94	90	-60	DD
F	NADD033	485270	8903975	237	147	90	-60	DD

Block	Hole ID	X	Y	Z	Max Depth	Azimuth	Dip	Hole Type
F	NADD034	485602	8903962	250	171	270	-60	DD
F	NADD035	485752	8903597	249	120	270	-60	DD
F	NADD036	485907	8903946	264	153	270	-60	DD
F	NADD037	485573	8904362	262	102	270	-60	DD
F	NADD038	485308	8904354	254	177	90	-60	DD
F	NADD039	485101	8903355	230	71	90	-60	DD
F	NADD040	485315	8904062	231	135	90	-60	DD
F	NADD041	485510	8904070	245	255	270	-60	DD
F	NADD042	485391	8904266	263	93	90	-90	DD
F	NADD043	485151	8903890	230	145	90	-60	DD
F	NADD044	485223	8903690	251	176	90	-60	DD
F	NADD045	485499	8903800	255	111	270	-60	DD
F	NADD046	485559	8903964	248	146	90	-60	DD
F	NADD047	485390	8903612	254	150	90	-60	DD
F	NADD048	485086	8903605	242	150	270	-60	DD
F	NADD049	485540	8904359	263	150	90	-60	DD
F	NADD050	485309	8903974	241	144	270	-60	DD
F	NADD051	485361	8904356	262	48	90	-60	DD
F	NADD052	485366	8904354	262	59	270	-60	DD
F	NARC036	485226	8903421	242	44	0	-90	RC
F	NARC037	485551	8904074	247	50	0	-90	RC
F	NARC038	485165	8903907	235	54	0	-90	RC
F	NARC039	485251	8904404	248	58	0	-90	RC
F	NARC040	485521	8904801	266	42	0	-90	RC
F	NARC064	485673	8903602	251	113	270	-60	RC
F	NARC065	485592	8903614	252	147	270	-60	RC
F	NARC066	485816	8903602	251	146	270	-60	RC
F	NARC067	485474	8903615	250	155	270	-60	RC
F	NARC068	485339	8903594	254	89	90	-60	RC
F	NARC069	485202	8903596	248	104	90	-60	RC
F	NARC091	485391	8903968	243	181	90	-60	RC
F	NARC092	485796	8903959	259	199	270	-60	RC
F	NARC093	485640	8904004	250	55	90	-60	RC
F	NARC094	485360	8903803	258	127	90	-60	RC
F	NARC095	485097	8903728	243	199	90	-60	RC
F	NARC096	485523	8904188	255	141	270	-60	RC
F	NARC100	485007	8903614	238	137	90	-60	RC
F	NARC101	485364	8904151	241	95	90	-60	RC
F	NARC102	485519	8904000	242	59	270	-60	RC
F	NARC103	485215	8903795	244	155	90	-60	RC
F	NARC104	485227	8903969	235	101	90	-60	RC
F	NARC105	485235	8904152	240	107	90	-60	RC
F	NARC130	485434	8903610	252	137	270	-60	RC
F	NARC131	485439	8903790	257	145	270	-60	RC
F	NARC132	485323	8903798	253	149	90	-60	RC
F	NARC133	485420	8903984	241	113	90	-60	RC
F	NARC134	485338	8903975	242	185	90	-60	RC
F	NARC135	485271	8903788	248	130	90	-60	RC
F	NARC136	485462	8904184	249	157	270	-60	RC
F	NARC137	485592	8904162	252	175	270	-60	RC
F	NARC138	485322	8904155	244	125	90	-60	RC
F	NARC139	485277	8904159	243	127	90	-60	RC
F	NARC140	485268	8903964	238	160	90	-60	RC
F	NARC141	485283	8903607	252	181	90	-60	RC
F	NARC142	485165	8903604	246	125	90	-60	RC
F	NARC143	485083	8903601	242	156	90	-60	RC
F	NARC144	485305	8903329	234	77	90	-60	RC

Block	Hole ID	X	Y	Z	Max Depth	Azimuth	Dip	Hole Type
F	NARC145	485188	8903315	231	121	90	-60	RC
F	NARC146	485162	8903762	248	199	90	-60	RC
F	NARC147	485046	8903769	239	180	90	-60	RC
F	NARC148	485548	8903780	255	127	270	-60	RC
F	NARC149	485325	8903461	245	91	90	-60	RC
F	NARC150	485169	8903460	240	151	90	-60	RC
F	NARC151	485007	8903463	231	123	90	-60	RC
F	NARC152	485250	8903308	224	71	90	-60	RC
F	NARC153	484982	8903282	227	121	90	-60	RC
F	NARC156	485262	8904354	248	80	90	-60	RC
F	NARC157	485602	8903967	250	180	270	-60	RC
F	NARC158	485805	8904142	258	125	270	-60	RC
F	NARC159	485728	8904349	263	118	270	-60	RC
F	NARC160	485740	8903801	260	185	270	-60	RC
F	NARC161	485845	8903807	264	151	270	-60	RC
F	NARC162	485310	8904354	254	199	90	-60	RC
F	NARC163	485114	8904354	232	178	100	-60	RC
F	NARC164	485859	8903951	262	150	270	-60	RC
F	NARC165	485772	8904050	254	119	270	-60	RC
F	NARC166	485689	8904259	258	89	270	-60	RC
F	NARC167	485573	8904348	261	169	270	-60	RC
F	NARC168	485575	8904496	267	149	270	-60	RC
F	NARC169	485277	8904506	249	113	90	-60	RC
F	NARC170	485528	8904355	263	163	270	-60	RC
F	NARC171	485043	8904173	229	149	100	-60	RC
F	NARC172	485047	8904361	232	195	100	-60	RC
F	NARC173	485155	8904341	235	139	100	-60	RC
F	NARC174	485162	8904554	244	161	100	-60	RC
F	NARC175	485117	8904555	242	167	100	-60	RC
F	NARC176	484969	8903992	230	192	100	-60	RC
F	NARC177	485695	8904548	268	143	270	-60	RC
F	NARC178	485560	8904144	253	126	90	-60	RC
F	NARC179	485694	8903966	255	163	270	-60	RC
F	NARC180	485498	8903971	243	94	0	-90	RC
F	NARC181	485467	8904139	250	157	90	-60	RC
F	NARC182	485578	8904256	257	175	270	-60	RC
F	NARC183	485490	8904266	256	104	270	-60	RC
F	NARC184	485241	8904261	245	176	90	-60	RC
F	NARC185	485410	8904353	263	143	0	-90	RC
F	NARC186	485313	8904259	253	181	90	-60	RC
F	NARC187	485432	8904074	243	175	90	-60	RC
F	NARC188	485605	8904072	246	100	270	-60	RC
F	NARC189	485641	8903885	255	211	270	-60	RC
F	NARC190	485546	8903882	251	165	270	-60	RC
F	NARC191	485444	8903886	250	109	270	-90	RC
F	NARC192	485338	8903884	252	169	90	-60	RC
F	NARC193	485334	8903884	252	178	90	-90	RC
F	NARC194	485256	8903894	240	121	90	-90	RC
F	NARC195	485641	8903804	257	166	270	-60	RC
F	NARC196	485319	8903697	257	163	90	-60	RC
F	NARC197	485415	8903701	259	127	270	-90	RC
F	NARC198	485511	8903704	255	175	270	-60	RC
F	NARC199	485611	8903722	257	175	270	-60	RC
F	NARC200	485712	8903700	257	175	270	-60	RC
F	NARC201	485810	8903699	258	163	270	-60	RC
FSL	NADD015	486093	8903208	272	100	281	-60	DD
FSL	NADD026	486070	8903075	272	75	280	-60	DD

Block	Hole ID	X	Y	Z	Max Depth	Azimuth	Dip	Hole Type
FSL	NADD027	486135	8903363	277	78	280	-60	DD
FSL	NARC034	486522	8903179	263	46	0	-90	RC
FSL	NARC035	486023	8903114	267	46	0	-90	RC
FSL	NARC063	486076	8903208	271	167	270	-60	RC
FSL	NARC099	486105	8903305	274	90	280	-60	RC
FSL	NARC112	486180	8903432	278	109	280	-60	RC
FSL	NARC113	486180	8903205	279	184	280	-60	RC
FSL	NARC114	486186	8903350	281	106	280	-60	RC
FSL	NARC115	486072	8903085	272	90	280	-60	RC
FSL	NARC116	486019	8902944	268	145	280	-60	RC
FSL	NARC126	486004	8903032	268	45	280	-60	RC
FSL	NARC127	486037	8903248	268	35	280	-60	RC
FSL	NARC128	486095	8903009	274	112	280	-60	RC
FSL	NARC129	486088	8903142	272	107	290	-60	RC
FSL	NARC154	486001	8903084	266	65	280	-60	RC
FSL	NARC155	486050	8903313	273	53	280	-60	RC